

- 10 -

THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

1. An inventory management system comprising:
an inventory server having a database of inventory products for classifying
5 Inventory levels based on predetermined rules comprising at least a critical stock
level and a rolling forecast of required stock over a predetermined time period, to
enable a product amount data signal to be generated, and output signals
generated based on the predetermined rules, the server enabling a supplier or
customer to view the output signals over a communication link to facilitate supply
10 or ordering of stock, and to trigger actuation of a request for resupply of stock or
stoppage instructions to stop resupply of stock in response to the product position
data signal;
a transport server for containing data relating to the transportation of stock
to enable transportation costs of stock to be supplied by a potential supplier and/or
15 ordered by a potential customer to be determined so that the total supply and
transportation cost of stock can be determined; and
a supply module for activation by the server in response to the trigger
activation from the server to call for supply of stock from suppliers or fulfil orders
submitted by customers and to generate supply documentation for the supply of
20 stock from suppliers or fulfilment of orders from customers.
2. The system of claim 1 wherein the predetermined rules further comprise a
minimum stock level, a current stock committed by single supplier, a multiple
supplier commitment level, and wherein the critical stock level is the difference
25 between the current stock committed by a single supplier and the multiple supplier
commitment level, and wherein the multiple supplier commitment level is the sum
of all the current stock committed by single suppliers.
3. The system of claim 1 wherein the inventory server provides the output
30 signals in the form of an XML formatted document that is stored on the server.
4. The system of claim 1 wherein the communication link comprises the
internet.
- 35 5. The system of claim 4 wherein the communication link is a secured
encrypted communications link.

- 11 -

6. The system of claim 1 wherein the product amount data signal is generated by the subtraction of the forecast and critical stock level data to provide both status buffer data and the stock position data.

5 7. The system of claim 1 wherein one of the outputs supplied by the inventory server comprises an inventory status and ageing data.

8. The system of claim 1 wherein one of the outputs comprises a consumption status report comprised of transportation data and inventory forecast data to yield a final consumption status report.

10 9. The system of claim 6 wherein the status buffer data and the critical stock level data are compared to the forecast to produce the product amount signal in the form of an order quantity to trigger activation of the request for resupply of stock.

10. The system of claim 6 wherein the inventory server has a master remote server, a main server memory and at least one data storage device, and wherein the master remote server loads data representing the level of forecast inventory required according to stored parameters in the permanent data storage device and determines the level of forecast inventory required according to data provided by the master remote server or separate processing systems.

11. The system of claim 10 wherein the master remote server compares the level of forecast inventory with the minimum level of inventory required, critical stock level and current stock committed by single supplier data to determine the nature of the trigger activation so that a determination is made as to whether there is excessive stock levels or shortage due to insufficient buffer stock so that triggering actions can be transmitted by the supply module to either a third party processing system or another system connected to the master server for further electronic processing, including reordering and inventory stoppage instructions.

12. The system of claim 11 wherein the product amount data signal is produced by combining the buffer stock data and minimum stock level data to determine whether the level of forecast inventory required data is adequate and, if not, the server supplies a trigger activation to order additional stock from a predetermined group of suppliers.

13. The system of claim 1 wherein the inventory server in response to the trigger activation creates an order message for supply to the order module which causes the order module to match each order message to each order or part
5 specification number from a specification database and consolidates part numbers and identifying data into a look up file.

14. The system of claim 13 wherein the look up file is used by the transport server to determine transportation costs from a database relating to the
10 transportation of stock, and a calculation processor for calculating estimated shipping costs to bring all stocks to be reordered to a particular location.

15. The system of claim 14 wherein the ordering module includes a sub-module for updating the look up file to trigger shipment booking and/or stock ordering together with transportation documentation.

16. An inventory management method comprising:
maintaining a database of inventory products for classifying inventory levels based on predetermined rules comprising at least a critical stock level and a
20 rolling forecast of required stock over a predetermined time period;
producing a product amount data signal, and output signals based on the predetermined rules;
enabling a supplier or customer to view the output signals over a communication link to facilitate supply or ordering of stock;
25 triggering actuation of a request for resupply of stock or stoppage instructions to stop resupply of stock in response to the product position data signal;
determining transportation costs of stock to be supplied by a potential supplier and/or ordered by a potential customer; and
30 triggering a call for supply of stock from suppliers based on the product amount data signal or fulfilling orders submitted by customers, and generating supply documentation for the supply of stock from suppliers or fulfilment of orders from customers.

35 17. The method of claim 16 wherein the predetermined rules further comprise a minimum stock level, a current stock committed by single supplier, a multiple supplier commitment level, and wherein the critical stock level is the difference

between the current stock committed by a single supplier and the multiple supplier commitment level, and wherein the multiple supplier commitment level is the sum of all the current stock committed by single suppliers.

5 18. The method of claim 16 wherein the output signals are in the form of an XML formatted document that is stored on a server.

19. The method of claim 16 wherein the communication link comprises the internet.

10

20. The method of claim 19 wherein the communication link is a secured encrypted communications link.

15 21. The method of claim 16 wherein the product amount data signal is generated by the subtraction of the forecast and critical stock level data to provide both status buffer data and the stock position data.

20 22. The method of claim 16 wherein one of the outputs supplied by the inventory server comprises an inventory status and ageing data.

23. The method of claim 16 wherein one of the outputs comprises a consumption status report comprised of transportation data and inventory forecast data to yield a final consumption status report.

25 24. The method of claim 21 wherein the status buffer data and the critical stock level data are compared to the forecast to produce the product amount signal in the form of an order quantity to trigger activation of the request for resupply of stock.

30 25. The method of claim 16 wherein forecast inventory is compared with the minimum level of inventory required, critical stock level and current stock committed by single supplier data to determine the nature of the trigger activation so that a determination is made as to whether there is excessive stock levels or shortage due to insufficient buffer stock so that triggering actions can be
35 transmitted by the supply module to either a third party processing system or another system connected to the master server for further electronic processing, including reordering and inventory stoppage instructions.

- 14 -

26. The method of claim 21 wherein the product amount data signal is produced by combining the buffer stock data and minimum stock level data to determine whether the level of forecast inventory required data is adequate and, if not, the server supplies a trigger activation to order additional stock from a predetermined group of suppliers.
27. The method of claim 16 wherein an order message is created which matches each order message to each order or part specification number from a specification database and consolidates part numbers and identifying data into a look up file.
28. The method of claim 27 wherein the look up file is used to determine transportation costs from a database relating to the transportation of stock, and a calculation processor for calculating estimated shipping costs to bring all stocks to be reordered to a particular location.
29. The method of claim 28 wherein the look up file is updated to trigger shipment booking and/or stock ordering together with transportation documentation.